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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/635,295  | 08/06/2003  | Naotaka Kumakiri     | IIP-107-A           | 8030             |
| 21828   | 7590        | 06/07/2005           | EXAMINER            |                  |
| CARRIER BLACKMAN AND ASSOCIATES<br>24101 NOVI ROAD<br>SUITE 100<br>NOVI, MI 48375 |             |                      | TO, TOAN C          |                  |
|   |             | ART UNIT             | PAPER NUMBER        |                  |
|   |             | 3616                 |                     |                  |

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                       |                  |
|------------------------------|-----------------------|------------------|
| <b>Office Action Summary</b> | Application No.       | Applicant(s)     |
|                              | 10/635,295            | KUMAKIRI ET AL.  |
|                              | Examiner<br>Toan C To | Art Unit<br>3616 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 01 February 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3 and 8-16 is/are rejected.  
 7) Claim(s) 4-7 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 06 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Allowable Subject Matter***

1. The indicated allowability of claim 3 is withdrawn in view of the newly discovered reference(s) to Baba et al (U.S. 6,684,973). Rejections based on the newly cited reference(s) follow.

### ***Specification***

2. The specification is objected to because in page 19, line 11, "the side airbag apparatus 4 is not allowed" should be -- the side airbag apparatus 4 is allowed--. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

3. Claims 9, and 12-16 are objected to because of the following informalities: "the control unit" should be –the deployment controller--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, the specification does not adequately disclose "a means for discriminating between short and tall people". The specification (pages 9-10) discloses that the detector 12b determines whether the physique of an occupant in the seat is small or large, and "discriminating between small

and large occupant" does not have equivalent meaning as to "discriminating between short and tall people". Examiner suggests "short and tall people" should be amended to --small and large occupant--.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Baba et al (U.S. 6,684,973)

As to claims 1-2, Baba et al discloses a side airbag system comprising: a side airbag (7), which deploys an airbag in a sideward direction with respect to an occupant sitting on a vehicle seat; a posture detector (detector 4-5), which determines a posture of said occupant; a weight detector (2), which measures a weight ( $V_{LOAD}$ ) of said occupant, and a deployment controller, which controls the deployment of said airbag based on the posture and weight of the occupant; wherein, the deployment controller (4) allows the deployment of the airbag irrespective of the posture of the occupant (see figure 6, and columns 5-6), when the weight ( $V_{LOAD}$ ) measured by the weight detector (2) exceeds threshold value ( $V_{LOADREF1}$ ).

As to claim 10, as best understood by the examiner, Babe et al disclose a side airbag, wherein, the posture detector comprise a means for discriminating between small and large occupant (as shown in figures 7A-H, and columns 5-6)

As to claims 11-16, Baba et al discloses a side airbag wherein the posture detector (detector 4-5) monitors a pattern the pattern ( $V_{EF}$ ) of signal output from a plurality of sensors (sensors 3-6 to 3-10) on the seat back (12) and estimates the occupant's posture (calculating  $V_{EFAV2}$ ) based on a profile of the pattern ( $V_{EF}$ ); wherein, the output from the posture detector (sensors 3-6 to 3-10) is categorized (see figure 6, category of  $V_{EFAV2}$ ), and the controller (4) controls the airbag based on the category of the output of the posture detector (sensors 3-6 to 3-10), the output from the weight detector (2) is categorized (see figure 6, category of  $V_{LOAD}$ ), and the controller (4) controls the airbag based on the category of the output of the weight detector (2).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3, and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba et al (U.S. 6,684,973) in view of Sakai et al (U.S. 6,253,133).

Baba discloses a side airbag system comprising: a side airbag (7), which deploys an airbag in a sideward direction with respect to an occupant sitting on a vehicle seat; a posture detector (detector 4-5), which determines a posture of said occupant; a weight

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detector (2), which measures a weight ( $V_{LOAD}$ ) of said occupant, and a deployment controller, which controls the deployment of said airbag based on the posture and weight of the occupant; wherein, the posture detector includes a plurality of first sensors (sensors 3-6 to 3-10), which are placed on the seat back and are line up at regular interval along the up-and-down direction with respect to the seat back (12).

Baba discloses a side airbag but does not directly disclose the location of the side airbag such as the side airbag is provided on one side of a seat back. Baba further fails to disclose a posture detector includes a second sensor, which is placed on the one side of the seat back.

Sakai et al (figure 8) teaches the invention wherein, the side airbag (20) is provided on one side of a seat back, and a posture detector includes first and second sensors (Ats1, Ats2), wherein the second sensor (ATs2) is placed on the one side of the seat back.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the side airbag of Baba as taught by Sakai et al to include the side airbag is provided on one side of a seat back, and a posture detector includes a second sensors, which is placed on the one side of the seat back in order to eliminate the possibility of a failure of detection, and ensure high precision and high reliability in automatically detecting whether or not the passenger sits in a normal posture.

With respect to claims 8-9, Baba discloses a side airbag, wherein the deployment controller allows the deployment of the airbag irrespective of the posture of the occupant (see figure 6, and columns 5-6), when the weight ( $V_{LOAD}$ ) measure by the

weight detector (2) exceeds threshold value ( $V_{LOADREF1}$ ); and the output from the posture detector (sensors 3-6 to 3-10) is categorized (see figure 6, category of  $V_{EFAV2}$ ), and the controller (4) controls the airbag based on the category of the output of the posture detector (sensors 3-6 to 3-10).

***Response to Arguments***

9. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

10. Claims 4-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan C To whose telephone number is (571) 272-6677. The examiner can normally be reached on Mon-Fri (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTo  
April 15, 2005

  
PAUL N. DICKSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600